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ABSTRACT

GRADES OR AGES: Grades K-3. SUBJECT MATTER: Physical health and nutrition. ORGANIZATION AND PHYSICAL APPEARANCE: The guide is divided into five sections: a) What is Food? b) Food for Energy, d) Food for Building, and e) The Varieties of Food. The publication format of four columns gives the reference, the major understandings and fundamental concepts, suggested teaching aids and learning activities, and supplementary information for teachers. The course objectives are presented in the introduction. The guide is soft-covered. OBJECTIVES AND ACTIVITIES: Each subsection contains questions and topics for discussion. The supplementary information provides teachers with further discussion material. INSTRUCTIONAL MATERIAL: A list of multimedia resources for the teacher is presented with a brief description of each item. STUDENT ASSESSMENT: No provision is made. OPTIONS: The guide is suggestive only. (BRB)

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STRAND I

PHYSICAL HEALTH
NUTRITION
GRADES K-3

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THE UNIVERSITY OF THE STATE OF NEW YORK

Regents of the University
(With years when terms expire)

1984 Joseph W. McGovern, A.B., LL.B., L.H.D., LL.D., D.C.L.,
Chancellor - - -

OVERVIEW

TO THE TEACHER ---

The nutrition curriculum at the K-3 level is directed toward developing positive attitudes toward food, accepting a variety of foods, appreciating eating as a pleasurable experience, realizing that people eat in many different ways, and beginning to understand the relation of food to health and growth.

Much of the nutrition teaching at this level can and should be integrated with other subjects -- social studies, arithmetic, spelling, reading, and art, for example.

The effectiveness of nutrition education in the school can be greatly enhanced if it is reinforced in the home, where the child's main experiences with eating take place. Periodic letters to parents explaining the activities and subject matter taught to children might be one way of informing parents and enlisting their cooperation.

The ideas listed under "Major understandings and fundamental concepts" in this curriculum are not meant to be statements to be taught. They are rather understandings to be worked toward. The teaching aids and learning activities suggested are designed to help the student grasp the concept himself. Grade levels are suggested for learning activities and teaching aids for two reasons: First, some teaching aids are definitely geared to one end or the other of the age group under consideration. Secondly, some indication of grade level may help to avoid possible repetition of learning activities as the child progresses through the grades.

It is fundamental to nutrition education at this level that activities which help children act in a desired way are more effective than talking about desired behavior.

OUTCOMES

Pupils in grades K-3 should:

- Be able to identify different varieties of food
- Appreciate the relationships between the foods they eat and their health, growth, and development
- Be cognizant of some factors that discourage or encourage individuals from eating certain foods
- Be encouraged to include a variety of foods (both familiar and unfamiliar) in their diets
- Recognize that families differ in the kinds of foods they eat and the manner in which foods are prepared for eating

REFERENCES	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR THE TEACHER
I. WHAT IS FOOD?	A. ALL LIVING THINGS NEED FOOD AND WATER -- Plants get their food from water, sunlight, air, and soil. - If any of these things are missing, the plant cannot grow normally and cannot live.	(1)* Grow plants from seeds, with and without fertilizer (plant food). Compare the rates of growth and general health of the plants. (2) Keep plants in the classroom; compare their progress with and without adequate materials for manufacturing food. Plant A - in soil, water twice a week, in sunlight Plant B - in soil, do not water, in sunlight Plant C - in soil, water twice a week, keep in the dark Plant D - in distilled water (or sand which has been washed several times, and water twice a week), keep in sunlight Answer the following questions: * Grade level suggested	A lima bean produces a rapidly growing plant. If you use a clear plastic glass for a container and place the bean in the soil at the edge, it is easy to see the growth of the sprout. Tomato plants produce rapid results. Soil is a source of soluble minerals for the plant. Tap water contains enough minerals, usually, so that dramatic results are not seen unless distilled water is used. Different plants have different needs for nutrients and for water. For example, the cactus can store water and therefore it can live on the dry desert. Other plants must have water often. A dandelion can grow on almost any kind of soil; a rose must have a more carefully chosen mixture.

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		How does a plant get its food? Can a plant live without water? Without light? Without soil? Why not?	
	Animals get their food from plants and from other animals.	(2) Discuss: Can animals live without food? Without water? Can they live longer without food or without water? (1) Discuss: The different kinds of foods that various animals eat, using examples of animals which are familiar: e.g. Horses eat grass, oats; hay; cats like fish, meat, milk. -	Introduce the idea that not all animals have the same kind of digestive abilities. e.g. Because a cow has a special stomach, she can eat some things (like hay) that people can't.
		- - - - - - - - - - - - - - (1) Children may enjoy telling about the foods their pets eat at home. - - - - - - - - - - - - - - (2) Visit a zoo and observe what the different animals eat. - - - - - - - - - - - - - -	

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		(2) Discuss the fact that people like and eat more different kinds of food than other animals do.	Children of this age often have little choice as to what they eat (except that they can choose to eat or not to eat what is provided for them.) Therefore, while it is important to lay the groundwork for informed choices of foods, at the primary level this can best be done by establishing positive attitudes toward food and the willingness to accept a variety of foods.
	Some young animals need milk to help them to grow.	(1) A child who has new kittens or puppies at home may provide a personal experience for talking about milk as food for young animals.	
	B. FOOD MAKES A DIFFERENCE IN HOW WE FEEL ABOUT OURSELVES, OTHERS, AND THE WORLD AROUND US.	(1) Discuss: How do you feel when you're hungry? (Possible answers: restless, tired, unhappy, don't want to do anything, etc.)	
		(1) A child with a baby brother or sister at home will be able to relate that the baby cries when hungry and sleeps happily after being fed.	
	C. THERE ARE MANY DIFFERENT KINDS OF FOODS.	(K) Have children sit on the floor in a circle.	

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		Pass around one at a time several objects -- nonfood and food. Talk about what each object is and what we do with it.	
		(K) Compile a pageful of several pictures from magazines of food products and nonfoods (some things that go in the mouth but are not foods, like toothbrush, lipstick, mouthwash). Ask children to circle the food items.	
		(K) Use A Child's Dictionary - shows pictures of objects and words for them, including a good section on foods. (From Scott, Foresman, & Co.)	
		(K) Use, as story books or coloring books, Dan and Sue Meet the Friendly Foods, or The Good Foods Coloring Book. (Both from USDA)	
		(1) Have a tasting party to sample different kinds of vegetables. Bring some which will be familiar to all the children, and also some more unusual ones. Try presenting in a raw form	Often a child will try a new food or even eat one he has disliked if the rest of the class is trying it. In conducting a tasting party, present the foods to be tasted in small portions, preferably bite-

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		some vegetables usually eaten cooked (e.g., small pieces of cauliflower, turnip strips). If time allows, let children participate in preparing the foods for the party. Ask children which foods they liked best. A tasting party may also be used to familiarize children with different fruits. Point out the seeds in fruits; the wide variation in the size of the seeds.	sized pieces that can be picked up in the fingers so the texture can be felt. Teach the name of the food. Encourage each child to try every food. Don't force a child to eat a food if he refuses, or make an issue out of a dislike expressed by a child.
		A tasting party is useful in teaching about all the different foods made from milk. (cream, butter, cheese, cottage cheese, buttermilk, ice cream, chocolate milk). In conjunction with a dairy foods tasting party, use the booklet Ice Cream Is Good, from the Dairy Council.	
		An art activity might be combined with a tasting party, with children drawing the different foods and learning to spell their names.	
		(2) For second graders, have a tasting party with	Appreciation of food depends on more than taste. Sight, smell, and texture all are involved in our reactions to food.

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		blindfolds. Ask children to try to identify the foods they are eating without looking. Use several foods of similar texture (apple & onion; lettuce and spinach; pear and peach) (1) Make butter at school. Start with heavy cream; beat with an egg beater until butter is formed. Have children take turns doing the beating. Whipped cream will be produced before the butter stage is reached. Give the children a taste at this stage -- just a lick is sufficient. Pour off the liquid at the butter stage (buttermilk) and add a pinch of salt to the butter. For a snack afterwards, spread the butter on a piece of bread for each child and provide milk to drink. (2) Use "Food and Nutrition Teaching Pictures" (from David C. Cook Publishing Company.) Set includes 12 pictures of poster size for classroom use. Small take-home	

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		pictures with messages to parents are also available. Rhymes to go with each picture are included. Appropriate here are pictures, #7 (salad vegetables) #8 (vegetables) #9 (fruits) #1 (milk)	
	D. WHERE DO DIFFERENT FOODS COME FROM? - Cows give us milk.	(3) Booklet "Where We Get Our Food" (Dairy Council) - - - - - - - - - - - - - - (2) Arrange a class field trip to visit a dairy farm. - - - - - - - - - - - - - - Dairy Council Materials: (1) Dairy Farm Panorama Kit (2) Uncle Jim's Dairy Farm (2) Film: "Uncle Jim's Dairy Farm" (3) More Milk Please!	Relative emphasis on this section should depend on the background of the children. In a rural area children may have a very clear understanding of the original sources of food. In an urban setting, children will likely need more help in developing the concept that food originates on the farm, in plants and animals, rather than in the supermarket.
	- Many animals give us meat.	(K) Use pictures and record "Farm in the Zoo" (from the Foundations for Learning Series, Scott, Foresman, & Company).	

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		Record has various animal sounds to listen to; color pictures of the animals are included. (1) Using pictures of animals, discuss what meats come from what animals -- especially those not obvious by their names, for example: hamburger, roast beef, sausage, ham, bacon, liver. Include fish, shellfish, poultry. - - - - - - - - - - - - - (2) Visit a farm where animals are raised for meat and eggs, such as a poultry farm.	
	- Vegetables and fruits grow on farms and in gardens.	(1,2) Visit a farm where vegetables and/or fruits are grown. - - - - - - - - - - - - - (2) "Food and Nutrition Teaching Pictures" (Cook Publishing Co.) #11, How Carrots Grow. - - - - - - - - - - - - -	

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		(3) Visit a bakery to see bread being made.	
	- Cereal and bread come from grain, which grows on the farm. The grain is ground to make flour which is used for making bread.	(2) Using pictures of food models, discuss where different foods come from. Especially concentrate on some of the less obvious ones, e.g. peanut butter, cheese, raisins, jam or jelly, cereal.	
	- The farmer sells the meat, milk, vegetables, fruits, and grain from his farm. Then the food is prepared to go to the supermarket, where we buy it.	(1) Use "Urban Panorama Kit" (Dairy Council) shows supermarket and shoppers.	
		(2) "Food and Nutrition Teaching Pictures" Cook Publishing Co.) #12: The Supermarket.	
	- The farmer, the man who owns the supermarket, and all the other people who handle our food keep it clean and good for us to eat.	(1) Have children act out roles of shopper and storekeeper by playing store using empty food boxes, cans, some real foods.	
II. FOOD IS USED FOR PLEASURE.	A. WE ALL HAVE FAVORITE FOODS THAT GIVE US	(1) Make a list of the favorite foods of all the	

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	PLEASURE BECAUSE WE LIKE THE WAY THEY TASTE, FEEL, SMELL, AND LOOK.	students in the class. See how many different favorite foods there are. Discuss: Everybody has his own idea of what foods taste good.	
		(2) Discover how we taste flavors by mapping out the areas of the tongue which taste different flavors. Pose the problem: On what parts of the tongue can we taste sweet, sour, salt, and bitter foods the best? With the toothpick, students can drop a little of each food on different parts of the tongue. Try to determine at which part of the tongue the flavor is tasted best. Students can draw a map of the tongue, indicating where the taste buds for sweet, salty, sour, and bitter are located.	MATERIALS NEEDED: Small amounts of the following: salt, sugar, lemon slices, grapefruit rind, linings from nut shells, toothpicks. Taste buds on the tongue are located in the following places: Sweet, tip of tongue and on sides halfway back; Salt, tip of tongue and around edges; Bitter, back of tongue; Sour; sides of tongue.
	B. FOOD IS PART OF MANY HAPPY SITUATIONS THAT GIVE US PLEASURE.	(K 1) Have a birthday party for all the children whose birthdays fall within a certain month. Cupcakes and ice cream can be served. Discuss the place of cake and ice cream in birthday parties.	Food means a great deal more to people -- including young children -- than nourishment. Foods are associated with events, people, places, pleasant and unpleasant feelings. People use food to serve

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		(Could you have a birthday party without them? Sure, but it wouldn't be the same). (2) Read the tea party sequence from Alice in Wonderland. (2) Use "Food and Nutrition Teaching Pictures" #4: Family eating together. (Cook Publishing Co.) Discuss: Mealtime is a time for the family to be together. (3) Discuss holidays in which food has a traditional place. Make bulletin board displays of foods traditional for Thanksgiving, Christmas, Passover, Easter, etc. at the appropriate times during the year.	purposes other than nourishment -- hospitality, love, concern, comfort. Food is even used as an outlet for tension, conflict, guilt or loneliness. The important thing is to recognize that food serves these basic purposes in our lives. These non-nutritive uses of food may be perfectly appropriate.
III. FOOD IS USED FOR DOING THINGS (ENERGY).	A. FOOD IS THE FUEL FOR OUR BODIES. - Food is used to produce energy to help us move.	(K) Show the picture of the train. Ask "What is this?" "What happens when the train runs out of fuel?" Show picture of train refueling.	MATERIALS: 3 sets of large pictures: 1. a train; a train being refueled or an engineer shoveling coal into the train.

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		Children form a long line and become a choo-choo train. What happens when the train runs out of fuel -- the children all stop. When it is refilled--they start going again. The next day or later, repeat the activity except use the example of the car. The next day or later, repeat except use the example of the children. Summarize by showing pictures of children playing and children who look tired. Ask what the tired children should do. Show the pictures of children eating. Pass a piece of paper to each child, each paper having two pictures: a boy running and a boy who is very tired. Ask children to circle the boy who had food to eat.	2. a car; a car at a gas station. 3. children running; children eating.
	- Food is used to produce heat to keep our bodies warm.	(1,2) Use pictures to show different kinds of fuel being used to produce heat. Examples: Gas stove or burner, wood fire, coal furnace. (3) Show that the body is kept warm by having students take their own	

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	B. LIKE ALL FUEL, FOOD IS USED UP AND MUST BE CONSTANTLY SUPPLIED FOR OUR BODIES TO FUNCTION.	temperature inside the building and, if the weather is cold, outside the building. Show that the student's temperature inside his body remains the same even if the air outside is cold.	
		- - - - - - - - - - - - - -	
	When we work or play we use up energy. Then we get hungry and need to eat food to give us more energy.	(2) Compare with a clock that must be wound up. It can run for hours but eventually it runs down and must be wound up again. If wound before it runs down it works better and doesn't have to stop.	
	It is especially important to eat when we get up in the morning to give us energy for the morning's work and play.	(2) Figure out how many hours pass between the last food eaten in the evening and breakfast the next morning. Emphasize that like the clock which runs down, our bodies run out of energy and need to be refueled after so long a time. (K) Use "Floor Puzzle: Breakfast" (Scott Foresman & Co.) A colorful fiberboard jigsaw puzzle 36" X 24" depicts a family at breakfast.	The Child Nutrition Act of 1966 provided federal funds for a pilot School Breakfast Program for needy children and for those who travel long distances to school. If your school participates in the program, it can provide an opportunity for teaching the importance of food in the morning.

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	- Many different kinds of foods are good to eat in the morning.	(1) Have children tell or draw pictures of what they like to eat in the morning. (2) Have children keep track of what they eat in the morning for a few days. Evaluate the breakfasts, keeping in mind the information under "supplementary information." (2) Use "Food and Nutrition Teaching Picture" #2: Breakfast (David C. Cook Publishing Co.) (3) Use Dairy Council materials What Did You Have For Breakfast This Morning? Poster shows children from different countries and ethnic groups; is intended to help children recognize that food habits can be different but still good. Activity piece for individual use, reproduces the poster and provides space for planning menus. The teacher's guide tells about the food habits in the countries of the children pictured. (3) Have children participate in making a bulletin board or display on the subject "Food in	The term "food in the morning" implies that traditional breakfast patterns need not limit the choice of foods eaten. Many children do not eat traditional breakfasts of bacon and eggs or cereal and milk. It is not important that they do so. It is important that the child have something to eat in the morning. In our culture the term "breakfast" implies a rather rigid food pattern to many people. Some children, if asked what they ate for breakfast, may reply "nothing" when in fact they did eat something that morning. If that something was a leftover piece of meat, or rice from last night's dinner, the child may not think of it as breakfast. The morning meal should contribute a substantial part of the calories and protein needed for the day. For example, all of the following breakfasts make significant contributions to total nutrient needs and provide enough calories for the morning's activities:

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		the Morning". Perhaps the display could be used at a PTA meeting or a parents night.	- Orange juice, ready-to-eat cereal, milk - Toast, butter, milk shake - Peanut butter sandwich, ice cream - Grits, ham, milk - Tomato juice, rice sugar, milk - "Instant" breakfast drink made with milk.
	- We need to eat several times every day.	(1) Discuss children's favorite foods for - Lunch - Dinner or supper - After school snacks	
		(2) Use Food and Nutrition Teaching Picture #3: Lunch (Cook Publishing Co.)	Many children are accustomed to three regular meals a day at home. Some families, however, due to divergent schedules of facilities for eating together, and for other reasons, may not often sit down to a meal as a family. This does not necessarily result in poor nutrition, but may, especially if nutritious food is not easily available to children who must fend for themselves. Emphasis on meals <u>per se</u> may not be at all relevant for such children. Emphasis on eating nutritious foods at meals, for snacks, and all through the day will be a more effective approach for all children.
		(3) Use Dairy Council Poster "Join Us For Lunch"	
		(1-3) If your school has a School Lunch Program, take advantage of the opportunity to teach about food. Study the school lunch menus for the week ahead; learn about new foods in class before they are encountered in the lunchroom.	

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		(1-3) If most of your pupils bring their lunches, observe and compare the foods eaten. If most of them leave school and go home for lunch, observe any practices (stopping at corner store for candy on the way) that may interfere with getting an adequate lunch.	For the requirements for a Type A lunch and for policies regarding free and reduced-price lunches, See Appendix I. A lunch does not need to be hot to be perfectly adequate. Variety of foods is not essential to adequacy, but is desirable from the standpoint of learning to accept a variety of foods.
IV. FOOD IS USED FOR BUILDING	A. ALL LIVING THINGS NEED FOOD FOR GROWTH		
	- To grow as we should, we need to have <u>enough</u> food; we also need to have the <u>right</u> kinds of food.	(3) Conduct an animal feeding demonstration using young, white rats. Two different demonstrations will illustrate that for growth, living things need <u>enough</u> food and the <u>right</u> kinds of food. In the first instance, two rats can be fed unrestricted amounts of an adequate diet, two other rats can be fed a very restricted amount of the same diet. In the second demonstration, both groups of animals should be fed unrestricted amounts, but one diet should be	It is wise to use two rats for each category of diet, in case one rat should die of disease or malnutrition. Differences in growth should be obvious within three to four weeks. The animals can be weighed at intervals (weekly or twice weekly) and their weights recorded graphically. After the differences in growth have become obvious, rehabilitate the rats whose growth was slowed by feeding them adequate diets.

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		adequate and the other should be lacking important nutrients. One way of achieving this is to feed the first group a diet of meat, bread, fruit and vegetables, with milk to drink; the other group can receive only bread, cooked spaghetti, and cereal, with water to drink. Less extreme examples can be used, but children will be able to see the relationship to their own diets more easily if fresh foods are used rather than prepared mixtures. At the end of the experiment, ask the following questions: - Which rats have gained the most? - Which rats have the nicest fur? - Which rats have the brightest eyes? - Which rats are the friendliest? - Which rats seem to be healthiest? - What made them healthier than the others?	Instructions for obtaining and caring for animals, preparing diets, building and maintaining cages, may be found in the National Dairy Council booklet "Animal Feeding Demonstrations for the Classroom".

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	B. EACH OF US GROWS A LITTLE DIFFERENTLY, BUT WE ALL NEED FOOD IN ORDER TO GROW AS WE SHOULD.	(3) Read <u>The Story of Henry J. Whodoesn'tknow-whattoeat</u> (Refer to page 27)	It is well established that a child's growth progress is influenced by nutrition. But this influence takes place within the framework of the child's hereditary potential for growth, and in interaction with other influences including disease, race, endocrine balance, and perhaps other factors.
	- Every person has his own individual pattern for growth--how much and how fast he will grow. A boy or girl whose mother and father are both short will probably also be short; a boy or girl whose mother and father are tall will probably also be tall.	- - - - - - - - - - - - - - - Discuss: Are all boys and girls who are the same age the same size? Are all grownups the same size? - - - - - - - - - - - - - - - (2) Use Dairy Council booklet <u>Growing Up</u> - - - - - - - - - - - - - - - (3) Have each child keep a record of his height and weight at intervals. Each child can make a colorful chart to record his own height and weight, or use the record "How I Grow" from the Dairy Council: a tag 5 1/2 X 3 inches for each child, 2¢ each.	Height and weight data for a child should be compared against his own previous height and weight, to show growth progress, rather than against the heights and weights of other children. If a child is small or large in relation to his classmates but is healthy, it is important to help him realize that his size is normal. Acceptance of normal differences at this age can help avoid more acute feelings of self-consciousness when the child is older.
	- To grow as you should you must be healthy. This means visiting the doctor for checkups, getting enough rest and exercise, and eating good food.		
	- Good food will help each person to grow to the size he was meant to be.	Correlate with curriculum for Strand I, Physical Health: Health Status.	
	- Differences in size are normal. Some boys and girls are shorter or taller, fatter or thinner than others. Everybody should grow, but not everybody will be the same size.	- - - - - - - - - - - - - - - (1) List all the parts of the body that depend on food. (Bones, skin, muscles, teeth, hair, etc.)	It may help to think of things which are an advantage for each type of person: the tall child can reach high places; the short one can wiggle into

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	- Every part of our body depends on good food to grow and be healthy.	(1) Use Dairy Council piece "Do You?"--poster miniature on dental health.	small places; plump children find it easier to learn to swim; thin ones may be more agile.
	C. CELLS ARE THE BUILDING BLOCKS OF THE BODY.	(3) Construct a make-believe person using styrofoam blocks held together with toothpicks, or use a bulletin board display built with discrete units of colored paper. The units can be compared to cells. Discuss the size of real cells. (They are too small to see without a microscope. It is only when many, many cells are together that they can make a person, or a flower, or any other living thing.)	- - -

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	D. FOOD SUPPLIES THE MATERIALS NECESSARY FOR MAKING NEW CELLS.	Discuss what happens when you run out of new "cells" for the make-believe person. (You must get some more--from the supply room or the store--but somebody had to make them to begin with.) The body cannot buy new cells--it has to make its own. The body uses food to make new cells.	
V. PEOPLE EAT MANY DIFFERENT KINDS OF FOOD.	A. DIFFERENT FAMILIES EAT DIFFERENT KINDS OF FOOD.	(1,2) Read story "Kenny learns about food and Mothers," available from Scott, Foresman Co. (Reprinted from the book Health for All, Book 3). The story of Kenny Lee and Manuel Gomez, who learn about food and mothers by eating lunch at each other's houses.	
		(2) Every family has its own favorite foods; encourage the students to talk about foods their families especially enjoy. If some children cite foods some of the others have never eaten, arrange to bring some of that food to class for the other children to taste.	
	B. PEOPLE IN DIFFERENT PARTS OF THE WORLD EAT DIFFERENT FOODS AND EAT IN DIFFERENT WAYS.		

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR THE TEACHER
		(3) Use Dairy Council piece "What Did You Have For Breakfast This Morning?" to discuss food habits in several countries.	
		(3) Invite a foreign student from the high school or a college to come and talk to the class about the foods eaten in his native country and how they differ from foods in the U.S.	"Manners" can be presented as basic agreements about how things are to be done; not good or bad in themselves, and varying the world over. It is important to know the rules so that everyone is comfortable.
		(3) Discuss the methods of eating in other countries (chopsticks in the Orient; no eating utensils at all in some countries; different ways of holding knife and fork in Europe and America; no knives in some Asian countries because the food is all in small pieces and doesn't have to be cut.)	
	C. WE CAN CHOOSE WHAT WE EAT FROM WHAT IS AVAILABLE TO US.	(K-3) Whenever possible, offer choices (between nutritionally sound alternatives) to the students--at school, snacks, lunches, tasting parties. Talk	A choice made because a food is liked should not be down-graded. Personal taste is a valid reason for eating a food. But children should be helped to realize that more than taste should be involved in choosing foods to eat. Strive to avoid instilling the attitude that there are two kinds of foods: "those I like" and "those which are good for me."

REFERENCE	MAJOR UNDERSTANDINGS AND FUNDAMENTAL CONCEPTS	SUGGESTED TEACHING AIDS AND LEARNING ACTIVITIES	SUPPLEMENTARY INFORMATION FOR THE TEACHER
		about <u>why</u> a child chose a certain food (usually because he likes the food.)	
		Discuss: - Are there other reasons for choosing foods? - Why do you think your mother chooses the foods she does for your family? (Because she likes them, because other family members like them, because she knows what kinds of foods you need to be healthy.)	Variety is not essential for an adequate diet. But nutritional adequacy is more likely when a variety of foods are eaten. Willingness to try new foods will be an attitude which will pay off in social situations and in adaptability to new environments, as well as helping to insure nutritional adequacy.
	D. WE SHOULD BE WILLING TO EAT A VARIETY OF DIFFERENT FOODS.	Incorporate this idea into the tasting parties suggested under Section I. Encourage children to try new foods and to experiment.	Children often mimic the food likes and dislikes of parents and other adults. Willingness to try new foods can be presented as a "grown up" attitude to have.

APPENDIX I.

Summary of School Lunch Standards.

In order to qualify for federal school lunch funds by participation in the National School Lunch Program, a school must serve meals meeting established nutritional requirements. To qualify as a "Type A Lunch", a lunch must include:

1. 8 ounces of fluid whole milk
2. A protein-rich food: 2 oz. of cooked or canned lean meat, fish, or poultry; or 2 oz. of cheese, or 1 egg, or 1/2 cup cooked dried beans or peas; or 4 tablespoons of peanut butter; or an equivalent combination of these foods.
3. Vegetables and fruits: two or more to equal 3/4 cup total. Undiluted juice can be used as the equivalent of 1/4 cup of the total. The inclusion of an ascorbic acid source daily and Vitamin A food on alternate days is recommended.
4. Bread or a bread substitute: either whole grain or enriched, one slice or its equivalent.
5. Butter or fortified margarine: 2 teaspoons used as a spread or in preparation of other foods.

If schools participate in the National School Lunch Program, they must provide lunches free or at reduced prices for needy children. U. S. Department of Agriculture regulations issued in October 1968, require that local school authorities develop and publicly announce their policy for determining which children are eligible to receive free or reduced price meals. The food service programs must be operated in such a way that children receiving free or reduced-price meals cannot be identified or singled out in any way.

MULTIMEDIA RESOURCES
TEACHER REFERENCES

SOURCE	+ITEM
David C. Cook Publishing Co. Elgin, Illinois 60120	1. Food and Nutrition Teaching Pictures. Set of 12 poster-size pictures. Packets of small pictures for taking home are also available, each picture with a letter to parents and a rhyme printed on the back. Each packet of small pictures contains five of each picture; you will need one packet for each five children.
Consumer and Marketing Service U. S. Department of Agriculture Washington, D. C.	1. Dan and Sue Meet the Friendly Foods (coloring book) (Note: The book is not available in quantity but a single copy may be ordered, and the book can be reproduced locally.) 2. The Good Foods Coloring Book (free)
National Dairy Council Address requests to regional offices: The Administration Building Room 106 Menands Regional Market Albany, N. Y. 12204 834 Front Street Binghamton, New York 13905 812 Kenmore Avenue Buffalo, N. Y. 14216 202 E. 44th Street New York, New York 10017	BOOKLETS: Ice Cream is Good. 40-page booklet, 2-page teacher's guide. Copy and simple illustrations tell about how ice cream is enjoyed in family meals and what goes into ice cream. 15 cents. Where We Get Our Food. 20-page booklet, teacher's guide. Explains where we get dairy foods, fruits, vegetables, eggs, cereals, and meat. Artwork depicts foods in their natural environment and workers who help bring food to us. 25 cents. My Friend the Cow. 36-page booklet, teacher's guide. The history of milk and where it comes from, planned for preschool and kindergarten children. 15 cents. Uncle Jim's Dairy Farm. 24-page booklet, teacher's guide. Depicts daily living on a dairy farm. 18 cents.

(Dairy Council regional offices, continued)

P. O. Box 1335
Poughkeepsie, N. Y. 12601

249 Highland Avenue
Rochester, N. Y. 14620

101 E. Darlington Road
Syracuse, N. Y. 13208

More Milk, Please! 20-page booklet, teacher's guide. Shows the importance of our milk supply and the inter-dependence of rural and urban areas. Questions are used to help the child find out more about production, processing, distribution, and consumption of milk. 15 cents.

Growing Up. 16-page booklet. Drawings and rhyme depict everyday experiences and point out proper food and health habits. 8 cents.

OTHER MATERIALS:

Food Models 171 life sized, color photographic models of foods, and teacher's guide. $3.00 per set.

Film: Uncle Jim's Dairy Farm.

Dairy Farm Panorama Kit. Wall panel, including 15 black and white photographs; record; teacher's guide. Panel shows overall view of dairy farm, while individual pictures show inside farm buildings and help children see more about life on a dairy farm. Record has farm sounds. $2.00 per kit.

Urban Panorama Kit. Wall panel, 16 black and white sketches, record, and teacher's guide. Gives overall view of the city, including supermarket and shoppers. $2.00 per kit.

Posters: More Milk, Please! Six posters, 20 X 16 inches. Tell the story of milk from the farm to the table. 75 cents per set.

Poster: Join Us For Lunch. Poster 15 X 19 inches. Designed to create favorable attitudes toward school lunch. 15 cents.

Tag: How I Grow. Colorful tag, 5 1/2 X 3 inches. For recording height and weight of children. 2 cents.

Set of Materials: What Did You Have for Breakfast This Morning? Poster (35 cents), activity piece (8 cents), and teacher's guide (20 cents). Poster shows youngsters from different ethnic groups. Activity piece for individual use reproduces the poster and provides space for menu planning. Teacher's guide tells about food habits in the countries of the children pictured.

SOURCE	ITEM
Scott Foresman & Co. 99 Bauer Drive Oakland, New Jersey 07436	A Child's Pictionary. For kindergarten or pre-schoolers, just beginning to learn to read. Shows pictures and the words for the item pictured. Good section on food items. "Kenny Learns about Food and Mother." From Health For All, Book 3. Reprinted from Kenny and Jane Make Friends by Elizabeth Vreeken. Oceana Publications, Inc. Dobbs Ferry, N. U. 1963. Floor Puzzle: Breakfast. 36" X 24" sturdy fiberboard puzzle. Brightly colored and delightfully drawn picture of family eating breakfast, in the form of a large jigsaw puzzle. $10.20. Farm in the Zoo. 33 1/3 record and set of color pictures depicting farm animals and the sounds they make. From "Foundations for Learning Series."
Department of Foods and Nutrition New York State College of Home Economics Cornell University Ithaca, New York	The Story of Henry J. Whodoesn'tknowwhattoeat by Karen Fimbel.

FOR THE TEACHER

Books

1. Eppright, E., Pattison, M. & Barbour, H. Teaching nutrition; 2nd edition Ames, Iowa. Iowa State University Press. 1963.

2. Leverton, M. Food becomes you. Garden City, New York. Dolphin Books, Doubleday & Company, Inc. 1961. (Paperback, $.95) See especially chapter XIII, "The first dozen years."

3. McWilliams, M. Nutrition for the growing years. New York. John Wiley & Sons, Inc. 1967.

Periodical Articles

1. Sliepcevich, E. M. & Creswell, W. H. "A conceptual approach to health education: implications for nutrition education." American journal of public health. 58: 684. April 1968.

2. Spencer, M. "Teaching while cooking with young children." Head start newsletter 3. No. 7 November, 1968.

Leaflets and Booklets

1. A source book on food practices. National Dairy Council. Focuses on food habits, how they develop, factors which influence them -- with emphasis on children and adolescents. $.15.

2. Animal feeding demonstrations for the classroom. National Dairy Council. $.30.

3. Food before six. National Dairy Council. Useful for work with parents. $.10.

4. Closing the nutrition gap: the child nutrition act of 1966. Washington, D. C. U. S. Department of Agriculture, Consumer and Marketing Service. U. S. Government Printing Office. 1967.

For work with parents:

1. Do you know a classroom when you see it? Denver, Colorado. American School Food Service Association, 4101 East Iliff Street. Leaflet describes the role of school lunch in promoting health and in nutrition education. First 6 copies free, additional ones $.04 each.

2. Your school lunch program. Albany, New York 12224. The State Education Department; School Lunch Supervision.